

CLAIMS

1 - A glazing unit comprising a glazed element (10) provided with a peripheral frame or with peripheral elements made of plastic overmolded onto said glazed element (10), said peripheral frame or said peripheral elements incorporating at least one element (13', 14', 15, 16, 17, 18', 19', 19'', 20) for reinforcing the glazed element, this reinforcing element being connected to said peripheral frame or said peripheral elements by an overmolding plastic (9) and consisting of a profile comprising a web part (11) that is arranged parallel or substantially parallel and close to the glazed element (10) and bears at least one projecting part (12) distal to the glazed element, characterized in that the projecting part or parts (12) does not or do not form a pocket that is open in the direction of the glazed element (10).

2 - The glazing unit as claimed in claim 1, characterized in that the projecting part or parts (12) extends or extend continuously over the whole length of the reinforcing element (13', 14', 15, 16, 17, 18', 19', 19'', 20).

3 - The glazing unit as claimed in claim 1, characterized in that the reinforcing element (13', 14', 15, 16, 17, 18', 19'', 20) comprises, longitudinally, a succession of projecting parts of limited extent.

4 - The glazing unit as claimed in any one of claims 1 to 3, characterized in that the reinforcing element (13', 14', 15, 16, 17, 18', 19', 19'', 20) comprises one or two lateral arms, each arm constituting a projecting part (12) borne by the web part (11).

5 - The glazing unit as claimed in claim 4, characterized in that the profile is a U-shaped profile with the concavity of the U facing away from the glazed element (10).

6 - The glazing unit as claimed in claim 4, characterized in that the profile comprises two lateral

arms, at least one of which is folded over toward the other, especially at a right angle, at the end of the profile, it being possible for the angles of the profile to be rounded.

5 7 - The glazing unit as claimed in claim 4, characterized in that the reinforcing element (15) is an essentially L-shaped profile, one of the branches of which acts as a web part (11) and the other as a projecting part (12).

10 8 - The glazing unit as claimed in claim 7, characterized in that the branch acting as a web part (11) is longer than the branch acting as a projecting part (12).

15 9 - The glazing unit as claimed in claim 4 characterized in that the two arms are joined together along or at a small distance from their free edges by a plate (11') that is parallel or inclined to the web part (11), if appropriate, with surface continuity with the web part.

20 10 - The glazing unit as claimed in claim 9, characterized in that the arms are joined together by the plate (11') over the whole length of the reinforcing element (17, 19').

25 11 - The glazing unit as claimed in claim 9, characterized in that the arms are joined together by a plurality of plates that are distant from one another.

12 - The glazing unit as claimed in claim 9 or 10, characterized in that the profile is formed by a strip of material folded over three times at a right angle.

30 13 - The glazing unit as claimed in claim 4, characterized in that the profile comprises a lateral arm that can be folded over inwardly at its free end at least once, the folded-over end of the arm being able to come into contact with the web at any point on the latter.

35 14 - The glazing unit as claimed in claim 13, characterized in that the lateral arm is folded over on itself in the manner of a hairpin.

15 - The glazing unit as claimed in claim 13, characterized in that the lateral arm is folded over once or twice at a right angle.

16 - The glazing unit as claimed in any one of 5 claims 9 to 15, characterized in that the internal region of the profile is filled with overmolding material (9), which material is not capable of exerting any stress whatsoever on the glazed element (10).

17 - The glazing unit as claimed in one of 10 claims 1 to 4, characterized in that the reinforcing element (20) is an essentially T-shaped profile, the base of which constitutes the web part (11) and the leg the projecting part (12), the web part (11) being situated facing the glazed element (10).

18 - The glazing unit as claimed in any one of claims 1 to 17, characterized in that the reinforcing element or elements (13', 14', 15, 16, 17, 18', 19', 19'', 20) has or have a coefficient of linear thermal expansion of above $10^{-5}/^{\circ}\text{C}$.

19 - The glazing unit as claimed in one of 20 claims 1 to 17, characterized in that the reinforcing element or elements (13', 14', 15, 16, 17, 18', 19', 19'', 20) has or have a coefficient of linear thermal expansion of above that of the glass, in particular at least equal to 25 $12 \times 10^{-6}/^{\circ}\text{C}$.

20 - The glazing unit as claimed in any one of claims 1 to 17, characterized in that the reinforcing element or elements (13', 14', 15, 16, 17, 18', 19', 19'', 20) has or have a coefficient of linear thermal expansion 30 of below $8 \times 10^{-6}/^{\circ}\text{C}$.

21 - The glazing unit as claimed in one of claims 1 to 20, characterized in that the reinforcing element or elements (13', 14', 15, 16, 17, 18', 19', 19'', 20) is or are made of metal or composite plastic.

22 - The glazing unit as claimed in one of 35 claims 1 to 14, characterized in that the reinforcing

element or elements (13', 14', 15, 16, 17, 18', 19', 19'', 20) has or have a thickness of between 1.5 and 5 mm.

23 - The glazing unit as claimed in one of claims 1 to 22, characterized in that the overmolding plastic (9) 5 consists of polyurethane or a thermoplastic, in particular poly(vinyl chloride).

24 - The glazing unit as claimed in one of claims 1 to 23, characterized in that the glazed element (10) consists of a laminated glass, which may or may not be 10 hardened, formed from at least two sheets of glass, with interposition of at least one plastic sheet between two adjacent sheets.

25 - The glazing unit as claimed in claim 24, characterized in that the glazed element (10) consists of a 15 hardened laminated glass having a total thickness of below 5 mm.

26 - The glazing unit as claimed in claim 24, characterized in that the glazed element (10) consists of a hardened laminated glass having a total thickness of below 20 4 mm.

27 - The glazing unit as claimed in one of claims 1 to 26, characterized in that it consists of an automotive glazing unit, especially for a sunroof.

28 - A reinforcing element (13', 14', 15, 16, 17, 25 18', 19', 19'', 20) for a glazing unit provided with a frame or with peripheral elements made of overmolded plastic as claimed in one of claims 1 to 27, said reinforcing element consisting of a profile comprising a web part (11) and at least one projecting part (12) in the 30 form of a lateral arm, optionally folded over toward the web part (11).

29 - A method of overmolding a frame or peripheral elements made of plastic onto a glazed element (10), in which method there is arranged, in at least one 35 mold element having a molding cavity, a glazed element (10)

and at least one reinforcing element (13', 14', 15, 16, 17,
18', 19', 19'', 20) consisting of a profile comprising a
web part (11) and at least one projecting part (12), and
the plastic is injected into the molding cavity,
5 characterized in that the projecting part or parts (12)
does not or do not form a pocket that is open in the
direction of the glazed element (10).